

Phenolic compounds and antioxidant activity of peanut's skin, hull, raw kernel and roasted kernel flour.

ABSTRACT

In this study, phenolic compounds and antioxidant properties of peanut's skin, hull, raw kernel and roasted kernel flour (RKF) were evaluated. Total phenolic contents (TPC) and individual phenolic compounds were determined using Folin-Ciocalteu and high performance liquid chromatographic methods, respectively. Antioxidant activity was measured utilizing 2, 2-diphenyl-1-1 picrylhydrazyl (DPPH) radical scavenging capacity and inhibition of linoleic acid peroxidation assays. Results of the study showed that antioxidant activity and phenolic compounds of peanut skin were highest followed by that of peanut hull, roasted kernel flour (RKF) and raw kernel. Roasting of peanut kernels at 160°C for 10 min did not affect the overall antioxidant activity and phenolic compounds of RKF. In the present work, a good correlation was recorded between TPC and radical scavenging capacity ($r^2=0.8436$) as well as TPC versus % inhibition of linoleic acid peroxidation ($r^2=0.6535$).

Keyword: Phenolic compounds; Antioxidant activity; Peanut.